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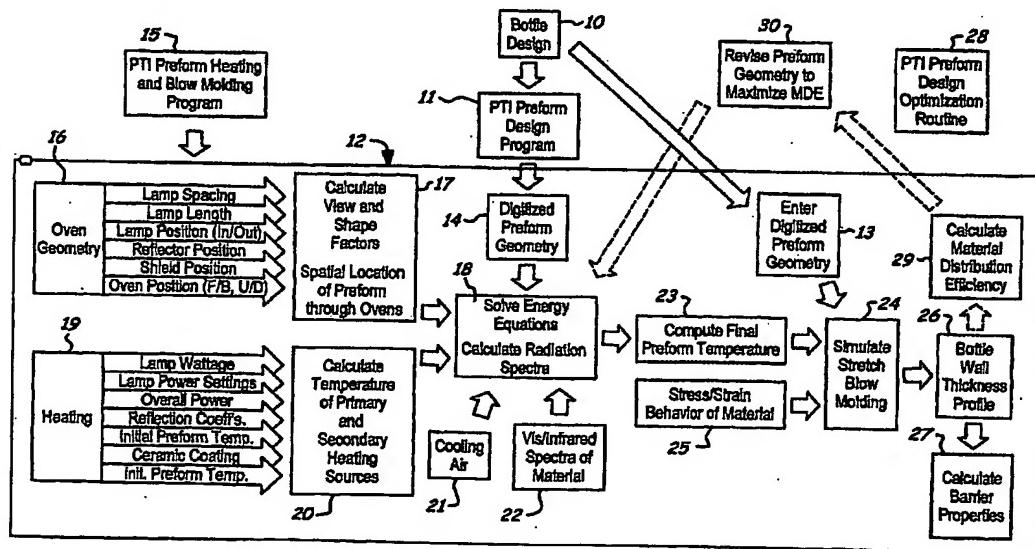
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(54) Title: APPARATUS AND METHOD FOR VIRTUAL PROTOTYPING OF BLOW MOLDED OBJECTS



(57) **Abstract:** A method is provided for simulating the heating of a plastic preform. A preform geometry is input into a preform design program. Oven geometry and spatial location of the preform throughout at least one oven is provided. Heating information is provided and the temperatures of the primary and secondary sources are calculated. Energy equations are solved based upon the preform geometry, the spatial location of the preform, the temperature the cooling air, and the absorption spectra of the preform material. At least one cross sectional thermal profile of a final heated preform is computed.

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